KOCHERGIN, V.P.; KRASIL'NIKOVA, Z.A.

Solution of magnesium in melts containing chlorides of alkaline and alkaline earth metals. Zhur.neorg.khim. 8 no.9:2029-2034 S '63. (MIRA 16:10)

1. Ural'skiy gosudarstvennyy uhiversitet imeni A.M.Gor'kogo.

KOCHERGIN, V.P.; KRASIL'NIKOVA, Z.A.

Formation of magnesium subchloride. Zhur.neorg.khim. 8 no.9: 2038-2040 S '63. (MIRA 16:10)

1. Ural'skiy gosudarstvennyy universitet imeni Gor'kogo.

KOCHERGIN, V.P.; SAVINA, R.Ye.

Corrosion of iron in a sodium tetraborate melt in the presence of fluorides of lithium, sodium, potassium, and calcium. Zhur.prikl.khim. 36 no.3:537-543 My '63.
(MIRA 16:5)

(Iron—Corrosion) (Fused salts)

KOCHERGIN, V.P.; KRUGLOV, A.N.

Kinetics of the electrodeposition of tin by reversed current.
Zhur.fiz.khim. 37 no.8:1682-1688 Ag '63. (MIRA 16:9)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov i Ural'skiy gosudarstvennyy universitet, Sverdlovsk.
(Tin plating)

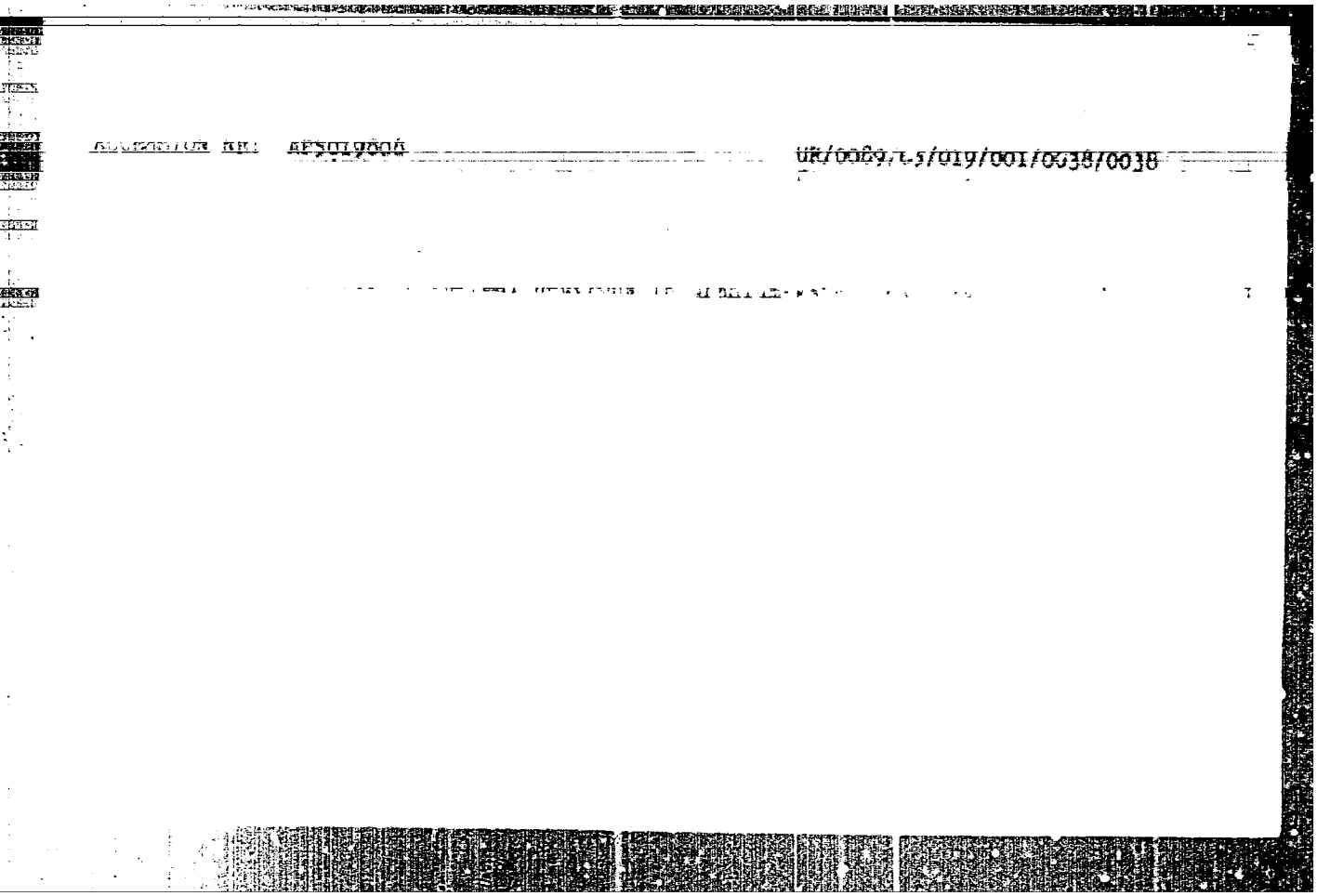
KOCHERGIN, V.P.; MALETINA, L.Ye.

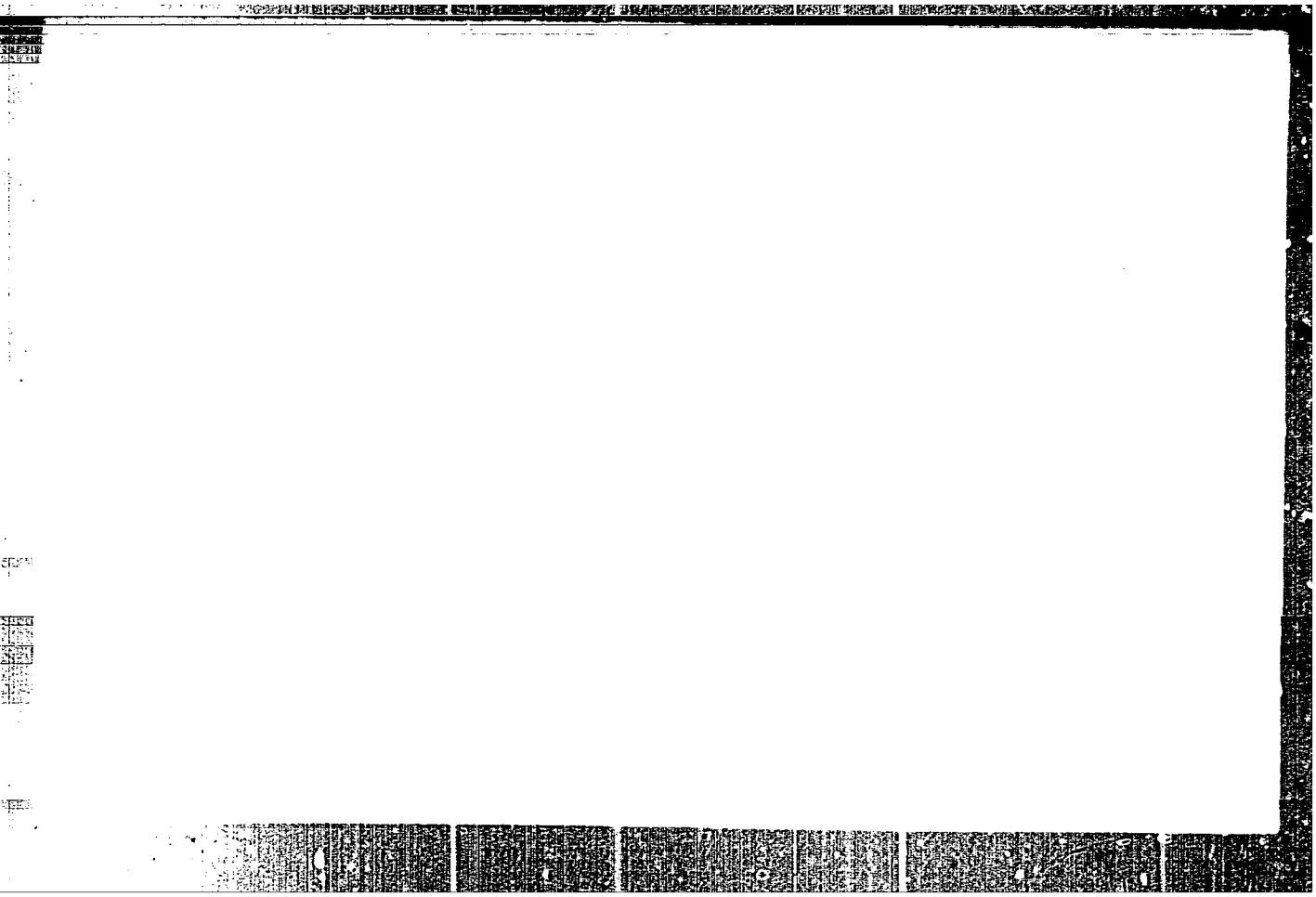
Corrosion of iron in the fused chlorides of alkali metals and barium in the presence of sodium tetraborate. Zhur. prikl. khim. 37 no.8:1837-1840 Ag '64. (MIRA 17:11)

1. Ural'skiy gosudarstvennyy universitet imeni Gor'kogo.

MARCHUK, G.I.; KOCHERGIN, V.P.

Effective method for solving the two-dimensional equation of diffusion for cells of square and hexagonal shapes. Atom. energ. 18 no.6:638-640 Je '65. (MIRA 18:7)





APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723510007-6"

L 13803-66 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/WB

ACC NR: AP6002219 (N) SOURCE CODE: UR/0080/65/038/012/2832/2835

AUTHOR: Kocherkin, V. P.; Kylosova, K. K.

ORG: Ural State University im. A. M. Gor'kiy (Ural'skiy gosudarstvennyy universitet)

TITLE: Oxidation of iron in molten phosphates and chlorides of sodium and zinc

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 12, 1965, 2832-2835

TOPIC TAGS: corrosion, iron, oxidation, zinc chloride, sodium chloride, phosphate

ABSTRACT: The rate of iron oxidation was studied at 850°C in the following binary salt melts: NaCl-$Zn(PO_3)_2$, NaCl-$NaPO_3$, NaCl-$Na_4P_2O_7$, and NaCl-Na_3PO_4. The object of the work was to learn more about the corrosive properties of molten salts, widely used high temperature lubricants. The isotherms of the average rate of iron oxidation in various melts is shown in fig. 1. The isotherms (850°C) of the average rate of iron oxidation in various melts are shown in fig. 2. The polytherms of the average rate of iron oxidation in various melts are shown in fig. 3. The rate of iron oxidation was found to increase in the sequence:

Card 1/4 UDC: 542.943 + 546.72

L 13453-66

ACC NR: AP6002219

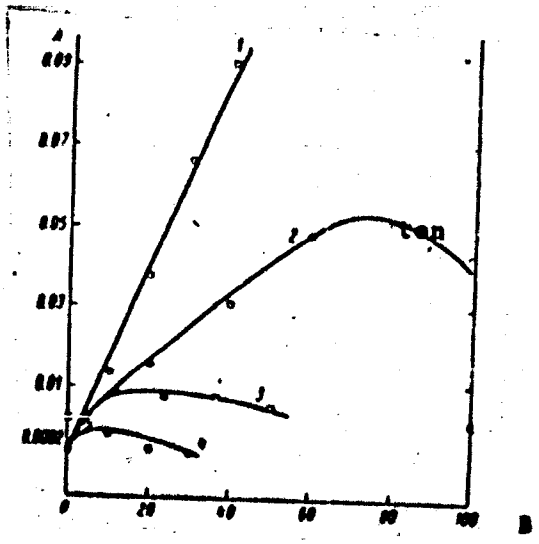


Fig. 1. Isotherms of average rate rate of iron oxidation in various melts at 850°C: A--average rate of oxidation ($g/cm^2 \cdot hour$); B--content of phosphates in the melt (wt %); 1--NaCl-$Zn(PO_3)_2$; 2--NaCl-$NaPO_3$; 3--NaCl-$Na_4P_2O_7$; 4--NaCl-Na_3PO_4 (80 wt % NaCl).

Card 2/4

L 13483-66

ACC NR: AP6002219

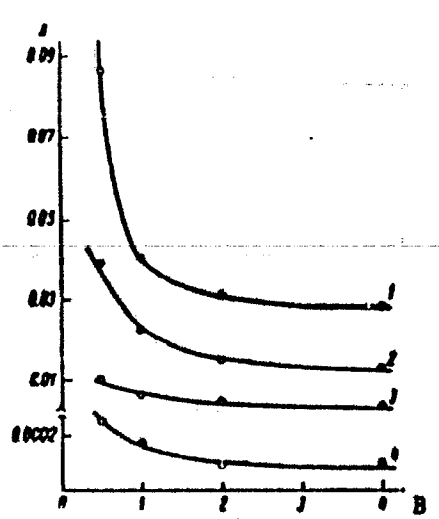


Fig. 2. Isotherms of average rate of iron oxidation in various melts; A--average rate of iron oxidation ($g/cm^2 \cdot$); B--time (hours). Other denotations same as in Fig. 1.

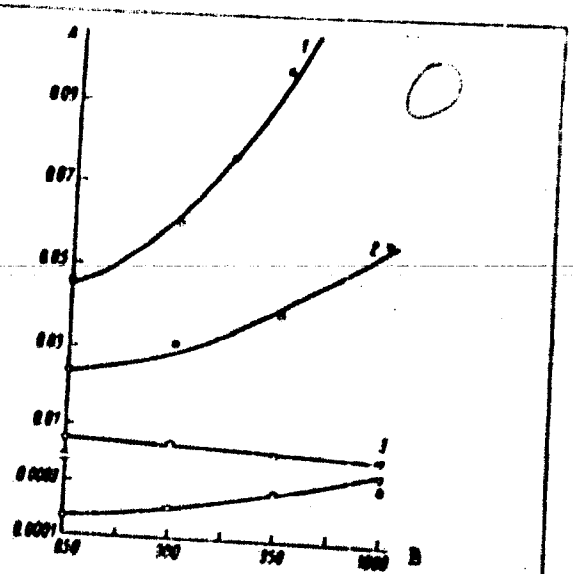


Fig. 3. A--average rate of iron oxidation ($g/cm^2 \cdot hour$); B--time (hours). Other denotations same as in Fig. 1.

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L 13483-66

ACC NR: AP6002219

$NaCl-Na_3PO_4$, $NaCl-Na_4P_2O_7$, $NaCl-NaPO_3$, $NaCl-Zn(PO_3)_2$. It was found that the vacuum degassing of melts was reflected in an increased rate of iron oxidation. X-ray examination revealed that in the course of oxidation in $NaCl-Na_3PO_4$ and $NaCl-Na_4P_2O_7$ the iron surface is coated with magnetite and wuestite, respectively. In the cases of oxidation in $NaCl-NaPO_3$ and $NaCl-Zn(PO_3)_2$ the iron surface is coated with respective iron salts. X-ray analysis was carried out under V. N. Konev at the laboratory of Ural University im. A. M. Gor'kiy. Orig. art. has: 4 figures.

SUB CODE: 07/ SUBM DATE: 21Aug63/ ORIG REF: 008/ OTH REF: 002

Card 4/4

MARCHUK, G.I.; KOCHERGIN, V.P.; NEVINITSA, A.I.; UZNADZE, O.P.; MALYAVINA, O.M., red.

[Critical parameters of homogeneous breeder systems] Kriticheskie parametry gomogennykh razmnozhaiushchikh sistem. Moskva, Atomizdat, 1965. 142 p. (MIRA 18:12)

L 20987-66
ACCESSION NR: AP5022493 UR/0089/65/018/006/0638/0640

AUTHOR: Marchuk, G. I.; Kochergin, V. P.

TITLE: Effect method for resolving two-dimensional diffusion equation for tetragonal and hexagonal shape cells

SOURCE: Atomnaya energiya, v. 18, no. 6, 1965, 638-640

TOPIC TAGS: neutron absorption, neutron cross section, neutron diffusion, dimension analysis

ABSTRACT: A method is suggested for resolving a two-dimensional diffusion equation for tetragonal and hexagonal shaped cells described by the two-dimensional one-group diffusion equation with a constant moderating source in a polar coordinate system. Considering only real shape cells (with intrinsic circular symmetry) the two-dimensional equation was reduced to a series of one-dimensional diffusion equations and resolved by a finite-difference formula. The results of calculations were verified by successful interchange of real shape cells by Wigner-Seitz equivalent cells. However, it was also shown that the use of the Wigner-Seitz equivalent cell may result in some errors. This is illustrated in a table exhibiting the mean (according to the cell) neutron absorption cross sections in various

Card 1/2

L 20937-66
ACCESSION NR: AP5022493

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approximations when the shielding blocks are close to each other (the maximum cell shape effect). The table shows that the consideration of cell geometry and kinetic effects result in reduced mean neutron absorption cross sections. For the hexagonal shape cells these effects are identical but for the tetragonal cell the shape effect becomes even larger than the kinetic effect. Orig. art. has 12 formulas and 2 graphs.

ASSOCIATION: none

SUBMITTED: 17Jul64 ENCL: 00 SUB CODE: NP, MA

NO REF SOV: 004 OTHER: 000 NA

Card 2/2 BK

ACC NR: AP6015287 (N) SOURCE CODE: UR/0365/66/002/003/0318/0322

AUTHOR: Kochergin, V. P.; Shevrina, Z. A.; Fomina, T. I.

ORG: Ural State University im. A. M. Gor'kiy (Ural'skiy gosudarstvennyy universitet)

TITLE: Iron corrosion in molten chlorides and phosphates of alkali metals and calcium

SOURCE: Zashchita metallov, v. 2, no. 3, 1966, 318-322

TOPIC TAGS: chloride, phosphate, corrosion rate, iron

ABSTRACT: Iron corrosion processes were studied in the following melts:

$LiPO_3 - LiCl$, $Li_4P_2O_7 - LiCl$, $Li_3PO_4 - LiCl$; $NaPO_3 - NaCl$, $Na_4P_2O_7 - NaCl$, $Na_3PO_4 - NaCl$, $NaPO_3 - NaF$; $KPO_3 - KCl$, $K_4P_2O_7 - KCl$, $K_3PO_4 - KCl$; $Ca(PO_3)_2 - CaCl_2$, $Ca_2P_2O_7 - CaCl_2$, $Ca_3(PO_4)_2 - CaCl_2$.

A decrease in the corrosion rate of iron was established in the series of meta-, pyro-, and orthophosphate melts, and for molten mixtures of phosphates and chlorides, in the series of cations $Ca^{2+} - Li^+ - Na^+ - K^+$. The corrosion rate of iron in these melts decreases with increasing exposure and decreasing temperature. In melts kept in a vacuum and in a nitrogen atmosphere, the corrosion rate of iron is lower than in melts

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UDC: 620.193.43

L 29950-66

ACC NR: AP6015287

not subjected to such treatment. In chloride-phosphate melts, wüstite forms on the surface of iron; in chloride-pyrophosphate melts, magnetite is formed, and in chloride-metaphosphate melts, polymer phosphates and iron phosphide coat the iron surface. Orig. art. has: 4 figures.

SUB CODE: 11 / SUBM DATE: 28Jan65/ ORIG REF: 024/ OTH REF: 011

L 42156-66 EWT(m)/T/EWP(t)/ETI IJP(c) WW/DJ/JD/JO/WB/OD

ACC NR: AT6022486 (N) SOURCE CODE: UR/0000/65/000/000/0348/0352

AUTHOR: Kocheргin, V. P.; Kolesova, R. K.

ORG: none

TITLE: Oxidation of iron in melts (salt lubricants) containing sodium and zinc chlorides and phosphates

SOURCE: Vsesoyuznoye soveshchaniye po fizicheskoy khimii rasplavlennykh soley. 2d, Kiev, 1963. Fizicheskaya khimiya rasplavlennykh soley (Physical chemistry of fused salts); trudy soveshchaniya. Moscow, Izd-vo Metallurgiya, 1965, 348-352.

TOPIC TAGS: metal oxidation, sodium chloride, sodium phosphate, zinc compound, high temperature lubricant, inorganic lubricant, MOLTEN METAL, IRON, OXIDATION RATE

ABSTRACT: The oxidation of iron in molten sodium chloride in the presence of sodium and zinc meta-, pyro-, and orthophosphates, i. e., in mixtures resembling closely those used as lubricants in the hot rolling of pipes, was investigated. The average oxidation rate in the series of phosphates added, Na_3PO_4-$Na_4P_2O_7$-$NaPO_3$-$Zn(PO_3)_2$ (in which the P_2O_5 content increases from 43.2 to 69.5 wt.%), increased; the actual oxidation rate of iron increased at first, then gradually decreased, owing to the accumulation of surface corrosion products. In NaCl-$Zn(PO_3)_2$, NaCl-$NaPO_3$, and NaCl-Na_3PO_4 melts, where the phosphate content was 20%, the average oxidation rate increased exponentially with the temperature; on the contrary, in NaCl-$Na_4P_2O_7$, which promoted the formation of

Card 1/2

ACC NR: AM6006274 Monograph UR/

Marchuk, G. I.; Kochergin, V. P.; Nevinitsa, A. I.; Uznadze, O. P.

Critical parameters of homogeneous breeder systems (Kriticheskiye parametry gomogennykh razmnozhayushchikh sistem) Moscow, Atomizdat, 65. 0142 p. illus., biblio., tables. 1,970 copies printed.

TOPIC TAGS: breeder reactor, homogeneous nuclear reactor, nuclear reactor technology

PURPOSE AND COVERAGE: Critical parameter data for nuclear reactors of various ranges, which were obtained as a result of an extensive set of calculations of homogeneous systems, are presented. The presently established principles of neutron physics calculations and the corresponding methods of calculation on contemporary electronic computers were taken as a basis. The basic theoretical schemes for physical calculation of nuclear reactors are described and the results are compared with experimental data. Tables of the critical masses and other physical parameters of homogeneous breeder systems are presented. Although the calculations were carried out for uniform spherically symmetric reactors, the well known conversion formulas can be used for reactors of other geometrical forms. New ideas and cooperative work were contributed by B. G. Dubovskiy and his group.

Card 1/3 UDC: 621.039.513:621.039.520.22

ACC NR: AM6006274

Development of the multigroup constants by I. I. Bondarenko (deceased) and his group was a great help to the authors. Valuable comments and constructive suggestions were made by the theoretical and experimental physicists: L. N. Usachev, S. B. Shikhov, V. A. Kuznetsov, V. Ya. Pupko, V. V. Orlov, G. I. Toshinskiy and others. Continued support and help were contributed by the mathematicians: Ye. I. Lyashenko, I. P. Markelov, L. I. Kuznetsova, G. A. Ilyasova, V. V. Smelov, T. I. Zhuravleva and others. The authors also acknowledge the valuable advice and comments of A. I. Leypunskiy, academician, AN UkrSSR, M. P. Rodionov, and M. N. Nikolayev. The book is intended for engineers and graduate and other students specializing in the field of nuclear power engineering.

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ACC NR: AM6006274

SUB CODE: 18/ SUBM DATE: 010ct65/ ORIG REF: 021/ OTH REF: 017

Card 3/3

ACC NR: AM6032024 (A) Monograph UR/

Dubovskiy, B. G.; Kamayev, A. V.; Kuznetsov, F. M.; Vladykov, G. M.; Guria, V. S.; Murashov, A. P.; Markelov, I. P.; Kochergin, Yu. P.; Veymugin, A. A.; Sviridenko, V. Ya.; Diyev, L.V.; Bogatyrev, V.K.; Vavilov, V. V.; Frolov, V. V.

Critical parameters of systems with fissionable materials and nuclear safety; a handbook (Kriticheskiye parametry sistem s delyashchimisya veshchestvami i yadernaya bezopasnost'; spravochnik) Moscow. Atomizdat. 1966. 228 p. biblio., diagrs., tables. 9000 copies printed.

TOPIC TAGS: nuclear safety, nuclear reactor, homogeneous nuclear reactor, heterogeneous nuclear reactor, chain reaction

PURPOSE AND COVERAGE: This handbook is intended for specialists concerned with the problems of assuring nuclear safety as well as for persons calculating, designing, operating, and studying the physics of nuclear reactors of various types, as well as for students in associated departments. The book discusses methods of creating and maintaining conditions which will exclude the possibility of an accidentally chain reaction during the processing, storage, and transportation of fissionable materials. The book is based mainly on the results of studies published before 1965. In addition to information on critical parameters of systems with fissionable materials, the authors considered it useful to include in the handbook the fundamental concepts of criticality, principles for assuring nuclear safety, a review of cases of the occurrence of uncontrolled chain reactions,

Card 1/2 UDC: 621.039.519.4/621.039.58

ACC NR: AM6032024

and the basic standards for nuclear safety. The authors express appreciation to M. P. Nodlonov, T. I. Sukhoverkhova, N. A.Gavrilova, and L. V. Antonkina for their valuable assistance. There are 64 references, 30 of which are Soviet.

TABLE OF CONTENTS (Abridged)

SUB CODE: 18/ SUBM DATE: 20Aug66/ ORIG REF: 030/ OTH REF: 034

Card 2/2

VLASOVA, N.A.; KOCHERGIN, V.S. (Moskva)

Concerning V.A.Giliarovskii's work, "Problem of the genesis of stammering in children and its role in the general development of the personality and its treatment." Zhur. nevr. i psikh. 61 no.5:767-768 '61. (MIRA 14:7)
(GILIAROVSKII, VASILII ALEKSEEVICH, 1875-)
(STAMMERING)

KUCHARGIN, V.V.

14(1)

SOV/67-59-5-25/30

AUTHORS: Yepifanova, V. I., Candidate of Technical Sciences, Kochergin, V. V., Engineer

TITLE: From a Trip to the German Democratic Republic

PERIODICAL: Kislorod, 1959, Nr 5, pp 58-59 (USSR)

ABSTRACT: In February, 1959, Soviet oxygen experts had traveled to the German Democratic Republic where they participated in a scientific and technical conference on refrigeration convened annually by the Chamber of Technology. 8 papers were read before the conference, inter alia a paper by V. I. Yepifanova, Candidate of Technical Sciences: Oxygen Turbo-compressors of the Types KTK-12.5 and KTK-7. After the end of the conference the participants were given the opportunity of visiting individual departments in specialized enterprises of oxygen apparatus and machinery, namely the designing office and plant for refrigerating units and machines at Wurzen: oxygen plants, compressors, leakproofing material, plunger pumps. At this plant high-performance air cooling units for compressors are manufactured and used. Furthermore, they made a field trip to the Rudisleben plant for chemical machinery. At this plant air separators for

Card 1/2

oxygen in gaseous state are built among many other chemical apparatus. A particular feature is the use of two different steel types for the warm and cold ends of the unit. Experiments are being conducted at this plant as to the use of aluminum for adsorbers. The third plant visited was the Leuna plant. Of the activities of this plant particular mention is made of the preparation of argon and krypton as well as of the gas analysis methods based on chromatography.

VOLKOV, M.A.; KOCHERGIN, Ye.M., inzhener-khimik.

Our experience with finishing staple cloth. Tekst.prom. 15 no.1:31-35 Ja '55. (MLRA 8:2)

1. Glavnyy inzhener fabriki im. rabochego P.Zinov'yeva (for Volkov).
(Textile finishing)

USSR Mining - Hydraulicking, Methods Aug 52

"Developing an Artificial Landslide and Caving of Ground by Water Under Pressure," B. E. Fridman, Cand Tech Sci, Engr A. V. Kochergina

Gidrotekh Stroi, No 8, pp 15-18

Discusses excavation of heavy clayish grounds, using monitors, and suggests considerably more efficient method with preliminary loosening and caving of ground by water introduced under pressure into ground through system of pipes. Greatest expediency can be achieved by application of method to an earth-bench thickness of 3-4 to 12-16 m. Describes operations in Podolsk limestone pit.

24757

KOCHEROINA, A.V., inzhener; FRIDMAN, B.M., kandidat tekhnicheskikh nauk.

New hydraulic monitors. Mekh.stroi. 10 no.12:14-17 D '53. (MLRA 6:11)
(Nozzles)

ALEKSANDROV, Nikolay Nikolayevich; KOCHERGINA, Anna Vasil'yevna; POKROVSKIY, Leonid Alekseyevich. Prinimal uchastiye KHNYKIN, V.F.; LOGUNTSOV, B.M., otv. red.; GEYMAN, L.M., red. izd-va; MAKSIMOVA, V.V., tekhn. red.

[Contemporary mechanization for working placer deposits] Sovremennaia mekhanizatsiia dlia razrabotki rossypei; spravochnoe posobie. Moskva, Gosgortekhizdat, 1963. 462 p. (MIRA 16:7)
(Hydraulic mining—Equipment and supplies)
(Automatic control)

ALEKSANDROV, N.N.; ASHKINAZI, A.S.; KOCHERGINA, A.V.

The GUTs-6 hydraulic giant unit. Gor. shur. no.5:40-44 My '64. (MIRA 17:6)

1. Tsentral'nyy nauchno-issledovatel'skiy gornorazvedochnyy institut, Moskva.

Koohergina, D.G.

136-8-21/21

AUTHOR: Koohergina, D.G.

TITLE: Production and Application of Rhenium in Capitalist Countries (Proizvodstvo i primeneniye reniya v kapitalisticheskikh stranakh)

PERIODICAL: Tsvetnye Metally, 1957, Nr 8, pp.93-96 (USSR)

ABSTRACT: The author describes the properties of rhenium and the production and uses of the element in capitalist countries. The article is based on non-Slavic literature. There are 2 tables and 8 non-Slavic references.

AVAILABLE: Library of Congress.

Card 1/1

SOV/137-58-7-14502

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 81 (USSR)

AUTHOR: Kochergina, D.G.

TITLE: Production and Consumption of Cobalt in the Capitalist Countries (Proizvodstvo i potrebleniye kobal'ta v kapitalisticheskik stranakh)

PERIODICAL. Byul. tsvetn. metallurgii, 1957, Nr 21, pp 32-33

ABSTRACT: The production of Co increased 46% from 1950 to 1956; its price fell from 5.7 to 5.17 dollars per kg. Production in the capitalist countries in 1956 is estimated at 15,000 t. The major producers (in t) are: Belgian Congo 8573, USA 1606, Canada 1361, Northern Rhodesia 1092. Substantial expansion of capacities is proposed in Africa and the USA. A mine and dressing mill to treat 1200 t Cu-Co ore per day (0.16% Co and 1.91% Cu) has been opened at Kilembe in Uganda. The capacity of the plant is appx. 9000 t/yr in Cu and appx. 1150 t/year in Co. In the USA, a plant is being built at Garfield to produce 1300 t/year electrolytic Co. Consumption of Co in the USA in 1950-1956 was as follows: >60% on magnetic and special steels, ~10% on hard alloys, ~4% on high-speed steels, and 10% on production of salts. A.P.

Card 1/1

1. Cobalt--Production

SOV/137-58-7-14507

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 82 (USSR)

AUTHOR: Kocheshkina, D.G.

TITLE: Production and Consumption of Antimony in the Capitalist Countries (Proizvodstvo i potrebleniye sur'my v kapitalisticheskikh stranakh)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 23, pp 33-34

ABSTRACT: Data are presented on the volume of recovery of Sb ores in the capitalist countries from 1946 through 1956. Sb production and consumption in the USA and England in 1950-1956 are described. A major share of consumption is accounted for by secondary Sb. 60-64% in the USA, and 45-50% in England, chiefly for batteries and babbitts.

A.P.

1. Antimony--Production

Card 1/1

SOV/137-58-7-14611

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 95 (USSR)

AUTHOR: Kochergina, D.G.

TITLE: Production of Sponge Zirconium (Proizvodstvo gubchatogo tsirkoniya)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 23, p 35

ABSTRACT: The major companies and plants producing Ti in the USA are listed. The increase in the capacity of the major companies is characterized by the following figures: 213.0 t in 1956, 1258.7 t in 1957, and an anticipated 2585.5 t in 1958. In Japan nothing but a pilot plant was in operation in 1956, but in 1959 it is proposed to produce 510 t Zr. The price of Zr dropped to $14.30 per kg.

A.P.

1. Zirconium--Production

Card 1/1

SOV/137-58-7-14486

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 80 (USSR)

AUTHORS: Verigo, K.N., Kochergiha, D.G.

TITLE: Extraction of Rare and Nonferrous Metals From Ores and Middlings by Means of Selective Solvents (Primeneniye selektivnykh rastvoriteley diya izvlecheniya iz rud i promezhutochnykh produktov tsvetnykh i redkikh metallov)

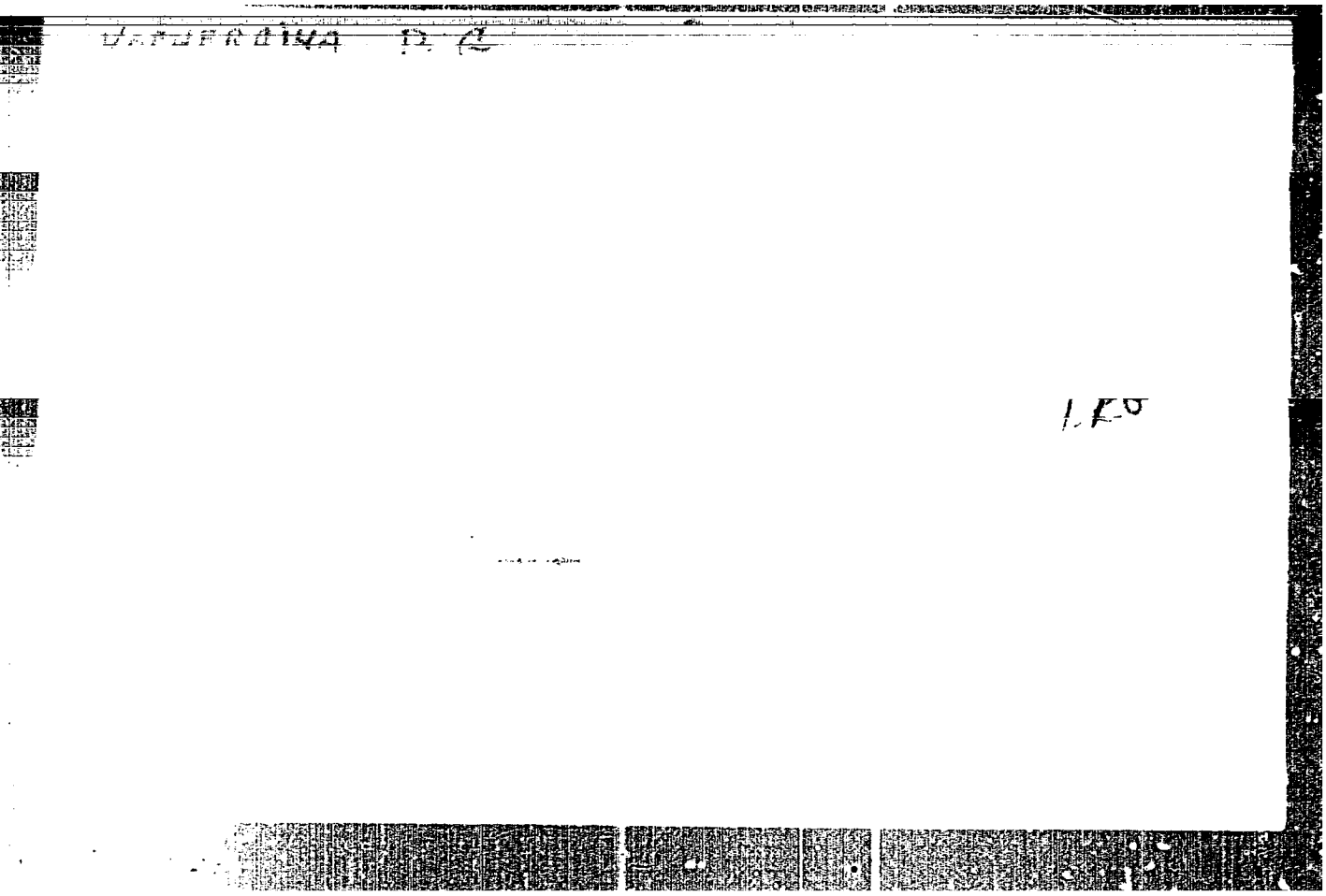
PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 24, pp 10-15

ABSTRACT: A description of the operational principle of extraction towers of various types is given, together with a flow sheet of a counter-current extraction process in open vats. The cost of extraction of various metals is quoted on the basis of data of foreign practice. The authors describe a number of systems for separation and extraction of metal by means of extraction processes performed with the aid of selective solvents.

L.P.

1. Ores--Processing 2. Metals--Solvent extraction 3. Solvent extraction--Equipment 4. Towers (Chemistry)--Performance

Card 1/1



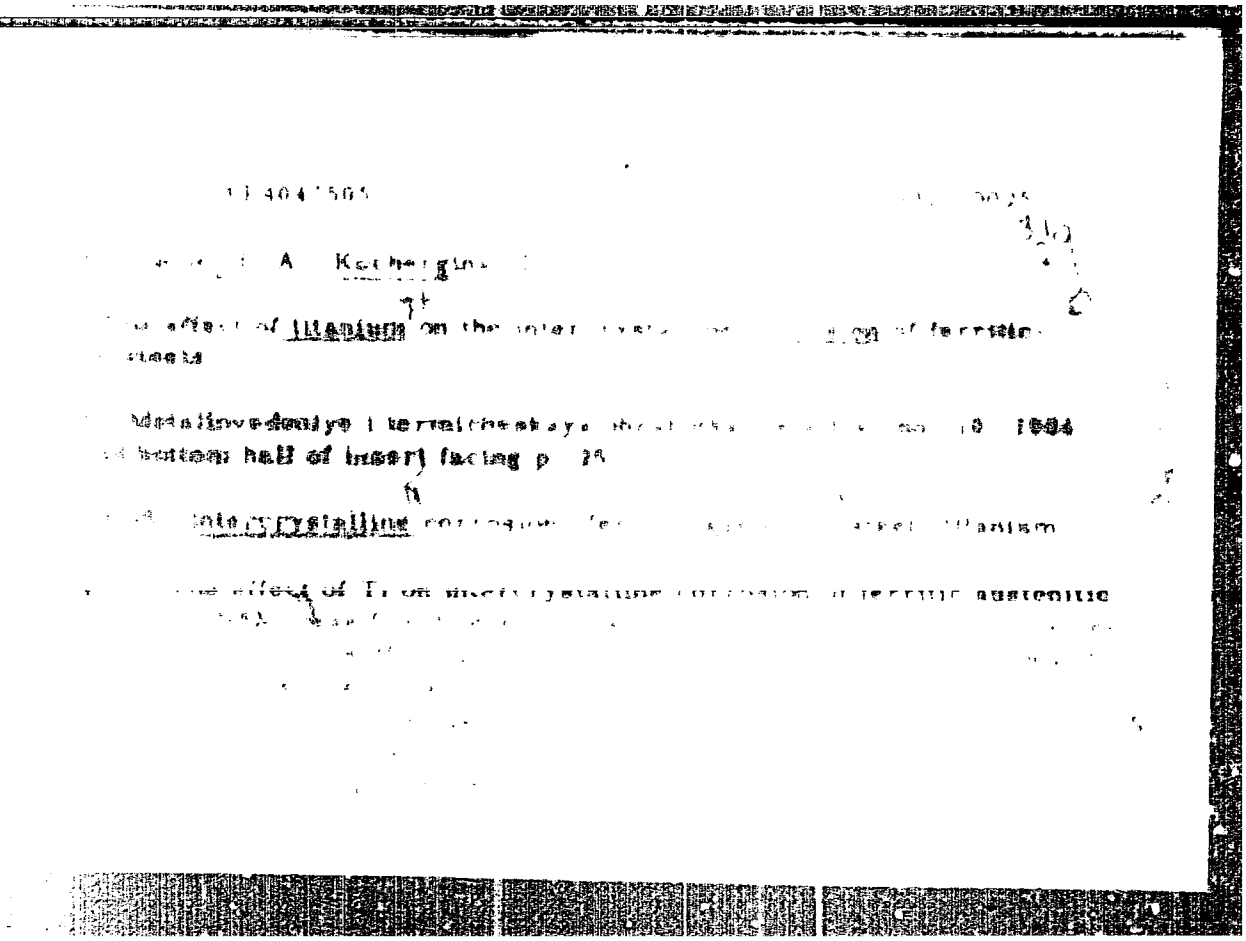
KOCHERGINA, D.G.

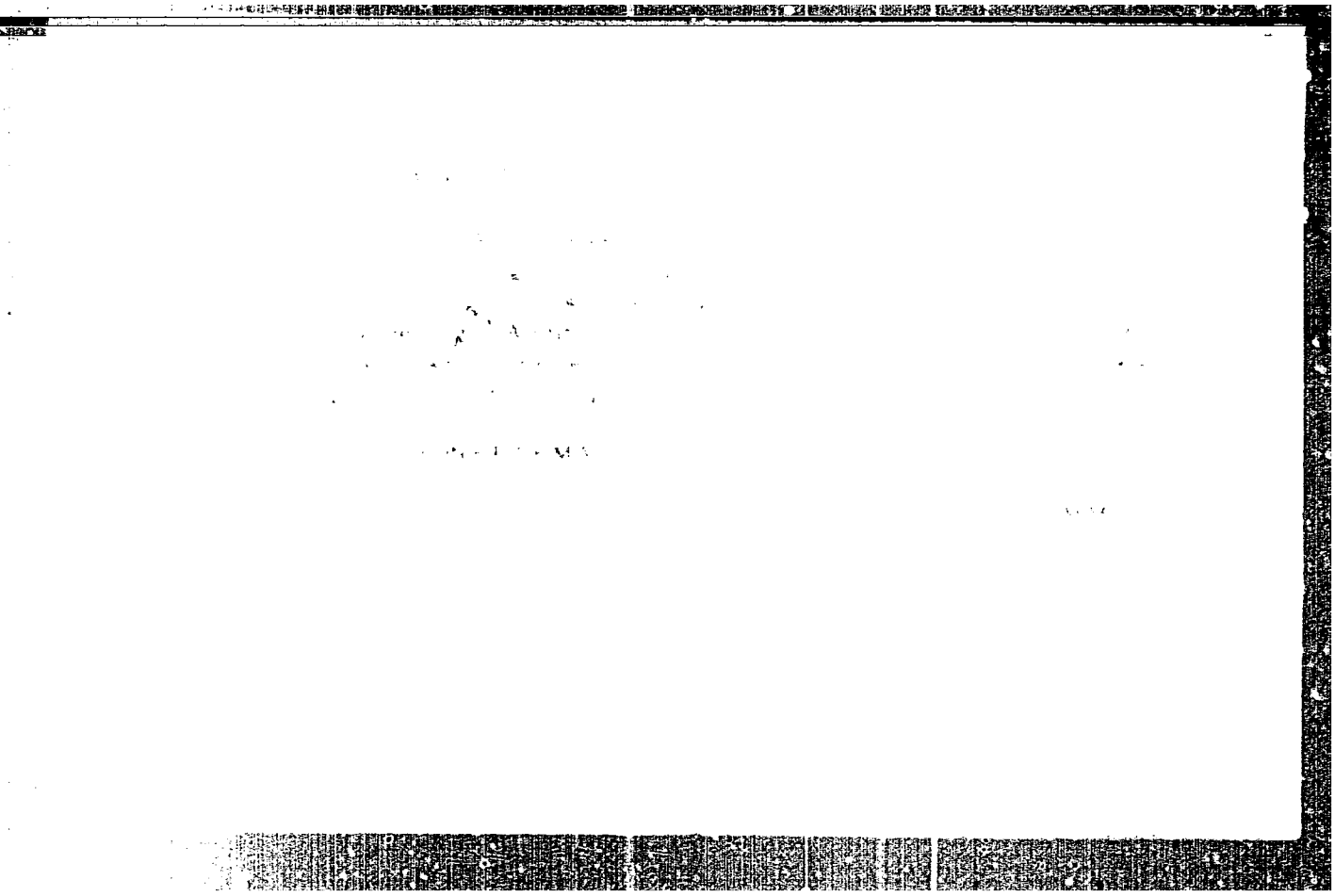
Output of copper ores in capitalist countries. Biul. TSIIN tsvet. met. no. 11:29-34 '58. (MIRA 11:7)
(Copper ores--Statistics)

DUBAYEVA, L.M., kand. ekon. nauk; KOCHERGINA, D.G., red.;
SINICHENKO, L.M., red.; LOGINOVA, Ye.I., tekhn. red.

[Coefficients of capital intensity in nonferrous metallurgy in the U.S.A.] Koeffitsienty kapitaloemkosti v tsvetnoi metallurgii SShA. Moskva, 1963. 57 p. (MIRA 17:4)

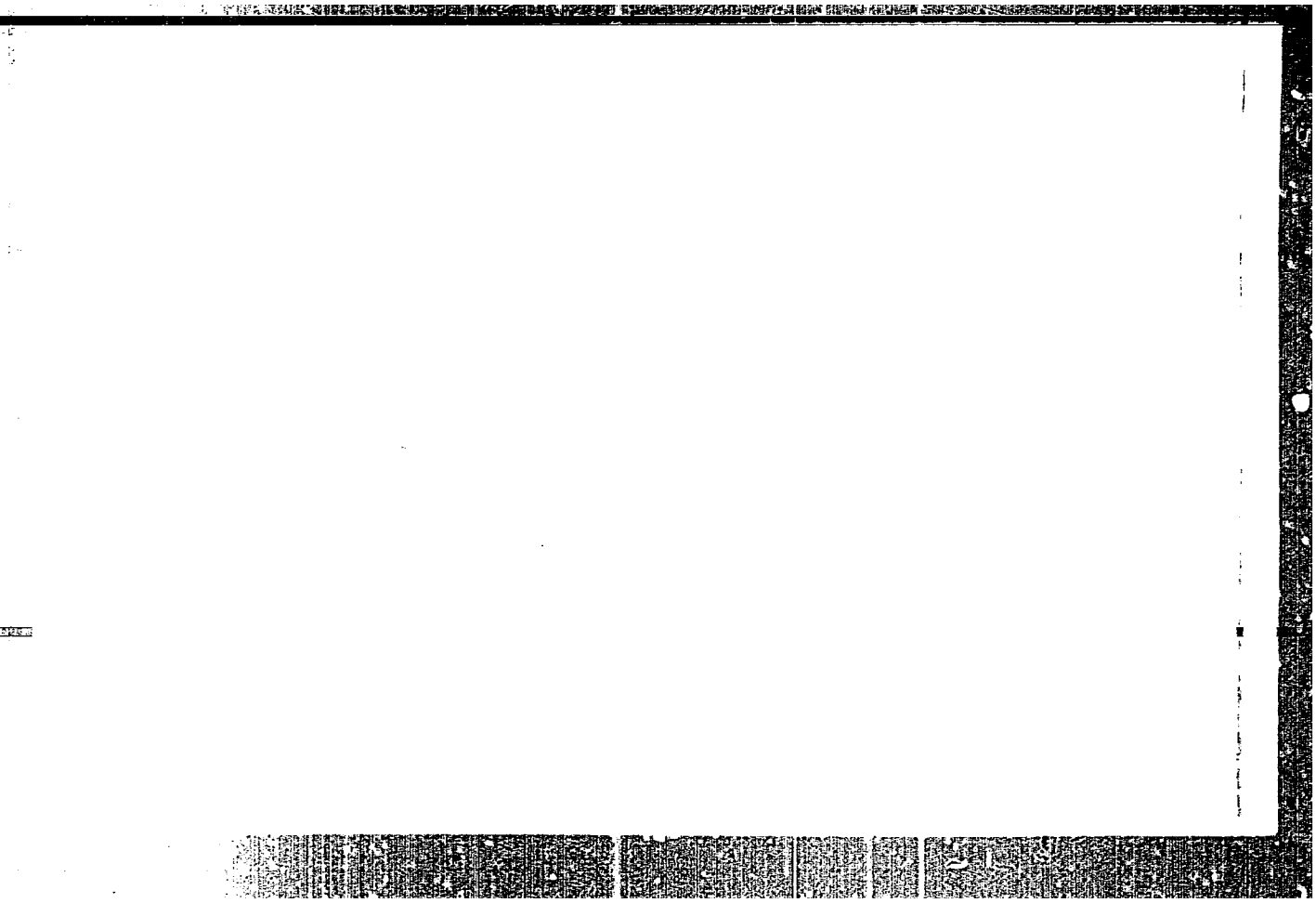
1. Moscow. TSentral'nyy institut informatsii tsvetnoy metallurgii.





...crystalline corrosion occurred in two-phase (ferrite ... austenite ...

... This is observed in Kh21N5 and (Kh21N6M2 ... after rapid



APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723510007-6"

L 4292-66 EWT(m)/EPF(c)/EWA(d)/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c) MJW/JT/DJ/WB

ACCESSION NR: AP5014129

UR/0365/65/001/003/0257/0264
620.196
669.15-194:669.24'26

AUTHOR: Levin, I. A.; Kochergina, D. G.

TITLE: Intercrystalline corrosion of the ferritic-austenitic type steels OKh21N5T and OKh21N6M2. I. Conditions for the occurrence of the tendency toward intercrystalline corrosion

SOURCE: Zashchita metallov, v. 1, no. 3, 1965, 257-264

TOPIC TAGS: corrosion resistant steel, intergranular corrosion, ferritic steel, austenitic steel

ABSTRACT: The characteristics of intercrystalline corrosion and its suppression were studied for the two phase steels OKh21N5T and OKh21N6M2. Twenty-seven heats were prepared, with the C contents ranging from 0.04 to 0.20%, Cr from 20.4 to 23.6%, Ni from 4.9 to 6.4%, Mo from 0 to 2.87%, and Ti from 0 to 0.61%. These were cast into ingots of dimensions 120 × 120 × 300 mm, and were further processed by forging and hot rolling to a final thickness of 2 mm. These sheets were subsequently heat-treated by quenching from 950, 1050, 1150 and 1250°C and then fully anneal-

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L 4202-66

ACCESSION NR: AP5014129

ed; the effects of this treatment on the appearance of δ-ferrite and on intercrystalline corrosion were noted. The tendencies toward intercrystalline corrosion determined by using the AM GOSTa 6032-58 standards technique, and curves were presented in which the time for the appearance and suppression of intercrystalline corrosion was given as a function of the temperature of full-annealing. In the ferritic-austenitic steels, intercrystalline corrosion tended to appear immediately after quenching as well as after subsequent annealing. It began at first at the grain boundaries of the ferrite-austenite phases; after full-annealing in a critical temperature region, the tendency toward intercrystalline corrosion appeared among the ferrite grains alone, and then after a period of time it began among the austenite grains. The ferritic constituents were found to be responsible for this type of corrosion in the ferritic-austenitic steels; therefore, the stability of these steels to grain boundary attack was determined the composition of this phase. Titanium was of value in suppressing intercrystalline corrosion in these steels, principally because it affected the composition of the ferritic grains. The higher temperature region for full-annealing also alleviated intercrystalline corrosion. Suppression of intercrystalline corrosion in the critical temperature region (full-annealing) was achieved by adding about 2% Mo to the ferritic-austenitic steels.

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L 6202-66
ACCESSION NR: AP5014129

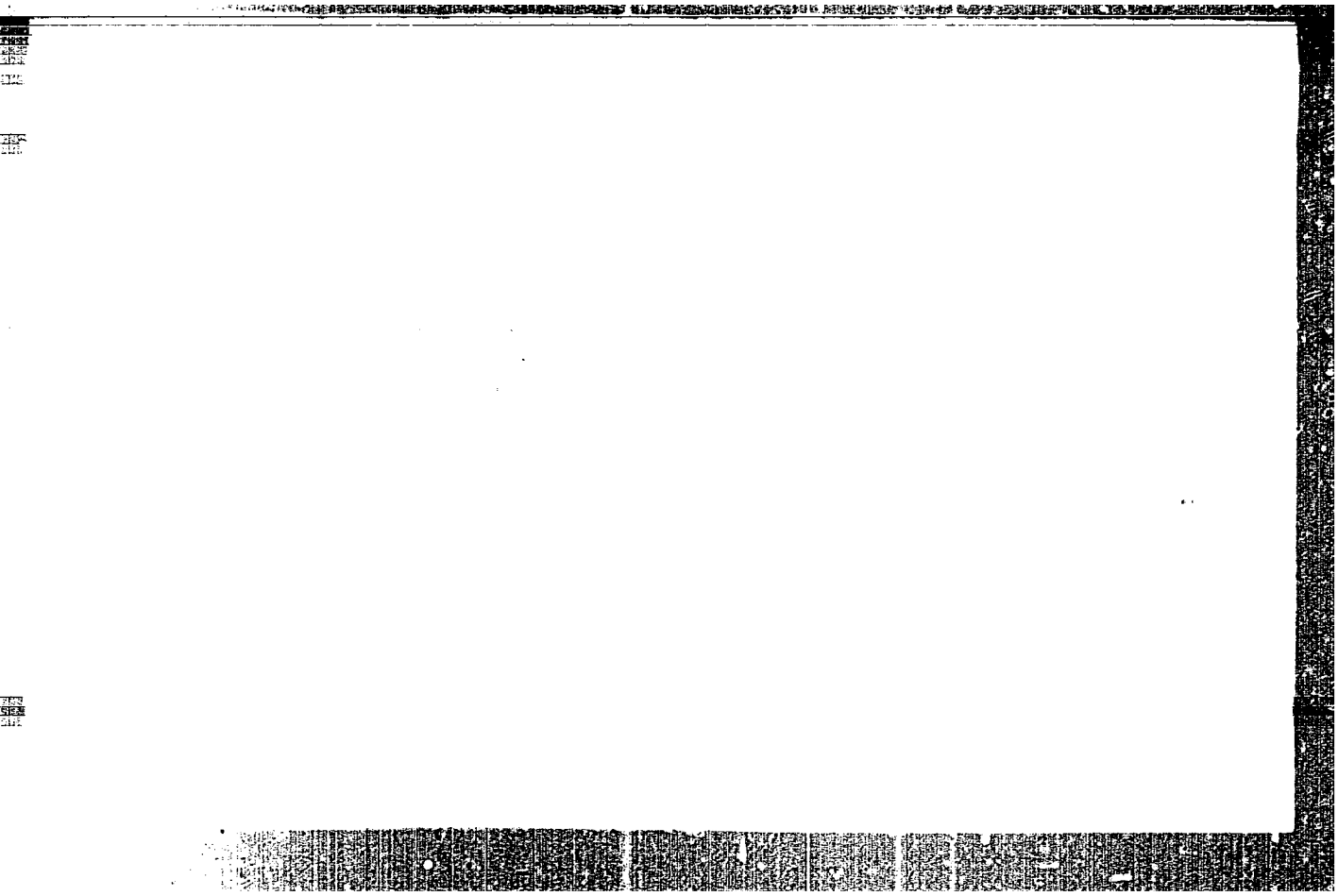
The best resistance to intercrystalline corrosion was gotten in the 0.04-0.09% C steels, without Ti, quenched from 950°C. Orig. art. has: 5 figures, 3 tables.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut neftyanogo mashinostroyeniya (All-Union Scientific-Research Institute of Petroleum Engineering)

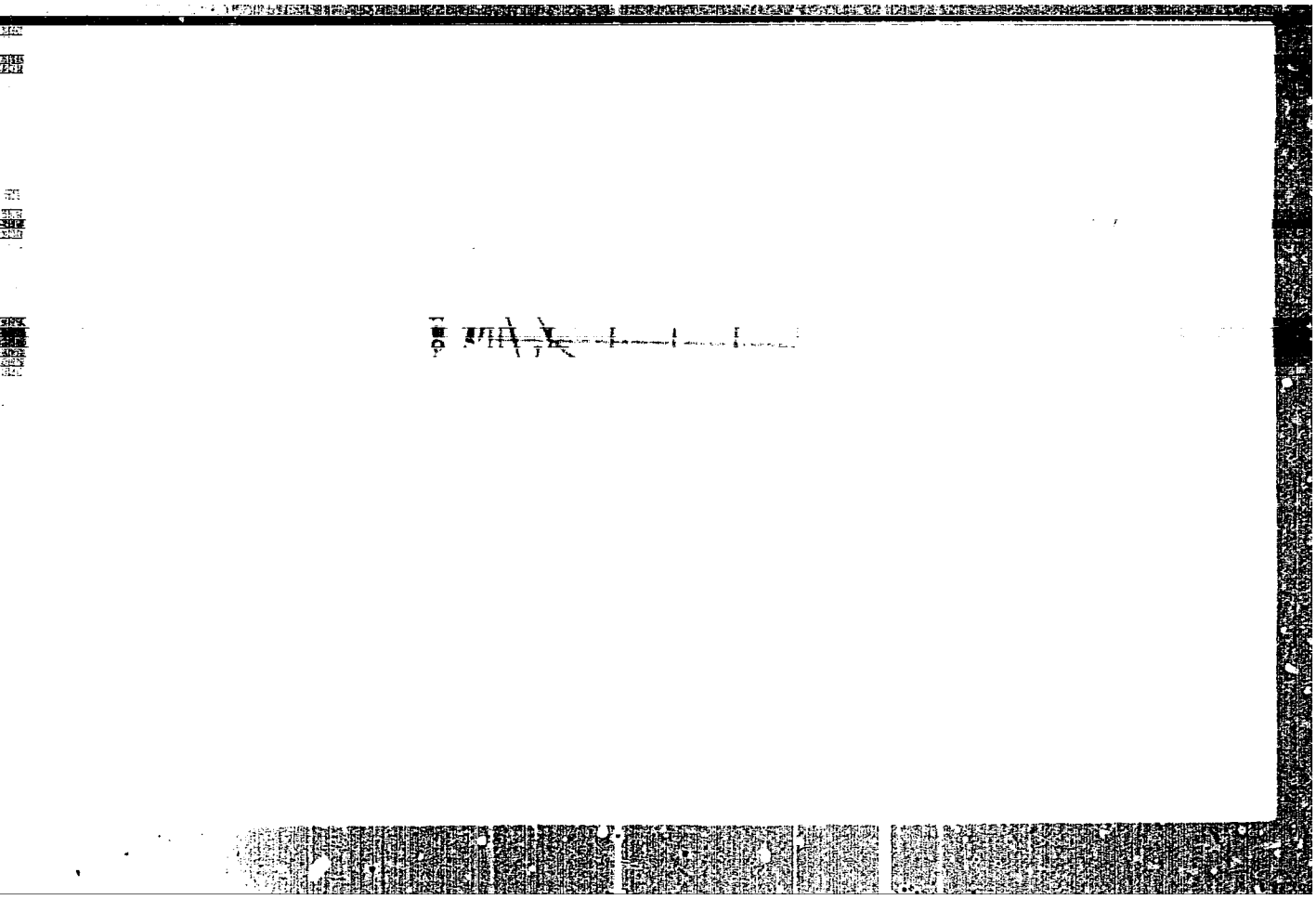
SUBMITTED: 02Nov64 ENCL: 00 SUB CODE: MM

NO REF SOV: 010 OTHER: 002

Card 3/3



APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723510007-6"



[redacted], N. I.

Soils - Kutuluk Valley

Physical properties of terrace soils along the Kutuluk River in Kuybyshev Province. Trudy Pochv. inst. No. 37, 1952.

Monthly List of Russian Accessions, Library of Congress June 1953. UNCL.

USSR.

Some chemical and physical properties of different mechanical fractions of a [illegible] podzolized soil. [illegible] *Pochvovedenie* 1954 [illegible] The chem. compn. [illegible] profiles, org. matter [illegible] exchange capacity [illegible] 0.05 [illegible] and [illegible] mm. With the increase [illegible] the org. matter content decreases. An exception [illegible] is the [illegible] mm fraction which contains more org. matter than the [illegible] 0.05-mm fraction because [illegible] present in it. The highest exchange capacity is found in the [illegible] 0.001-mm fraction of the B_1 horizon. All the fractions of the A_1 horizon have lower exchange capacity than the corresponding fractions in the other horizons. Of the minerals the *B* horizons contain more of the montmorillonitic type than the *A* horizon. Coagulation with $CaCl_2$ takes place more readily in all fractions of the *B* than of the *A* horizon. J. S. Joffe

KRASOVITSKIY, B.M.; KOCHERGINA, L.A.

Use of monoacyl derivatives of o-diamines as reagents for removal of nitrites in determination of nitrates in mixtures with nitrites. Doklady Akad. Nauk S.S.S.R. 86, 1121-4 '52. (MLRA 5:11)
(CA 47 no.22:12319 '53)

1. A.M.Gor'kiy State Univ., Kharkov.

5(4)
AUTHORS: Lutskiy, A. Ye., Kochergina, L. A. SOV/76-33-1-29/45

TITLE: Intramolecular Hydrogen Bonds and Dipole Moments of Organic Compounds (Vnutrimolekulyarnaya vodorodnaya svyaz' i dipol'nyye momenty organicheskikh soyedineniy). II. The Dipole Moments of Naphthols, Acylnaphthols, and of Their Methyl Ethers (II. Dipoln'nyye momenty naftolov, atsilnaftolov i ikh metilovykh efirov)

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 1, pp 174-179 (USSR)

ABSTRACT: The dipole moments μ of the acylnaphthols are of interest in connection with an explanation of the characteristics and the influence of the second cycle in naphthalene on the bond of π- and n-electrons of the substitution groups (Ref 1). Furthermore, the applicability of the connections of benzene derivatives (Ref 2) to naphthalene derivatives can be examined. The μ values for 1- and 2-naphthols, 1-formyl-2-naphthol, 2- and 4-acetyl-1-naphthol and their methyl esters in benzene and dioxane were determined. The method of weak solutions was used. The dielectricity constants ε were calculated from the proportion of the condenser capacities which were filled with

Card 1/2

Intramolecular Hydrogen Bonds and Dipole Moments of Organic Compounds. II. The Dipole Moments of Naphthols, Acylnaphthols, and of Their Methyl Esters SOV/76-33-1-29/45

the solution and the pure solvent and their density $d_{1,2}$ was shown in tables(Tables 1,2). In correspondence to phenol and its derivatives, the methyl esters of the naphthols also have a smaller μ value than the initial oxy-compounds. The presence of the second cycle in naphthalene obviously favors the influence of the medium on the dipole moment of the molecules of the substance dissolved and causes an obvious increase of the binding degree of the functional molecule groups (as compared to the benzene derivatives). The orthoacylnaphthols react like orthosubstituted phenols with an intramolecular hydrogen bond because their μ value is abnormally smaller than that of paraisomers. The investigation results obtained confirm the applicability of the criteria on the dipole moment of benzene derivatives to dissubstituted naphthalene and the presence of a solid intramolecular hydrogen bond with ortho-isomers of the latter. There are 3 tables and 23 references, 6 of which are Soviet.

ASSOCIATION: Politekhnicheskiy institut im. V. I. Lenina, Khar'kov
(Polytechnic Institute imeni V. I. Lenin, Khar'kov)

SUBMITTED: July 6, 1957

Card 2/2

5(4) 05805
SOV/76-33-10-3/45

AUTHORS: Lutskiy, A. Ye., Kochergina, L. A.

TITLE: Intramolecular Hydrogen Bond and Dipole Moments of Organic Compounds. VI. Nitro- and Nitroso-naphthols

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 10, pp 2135-2140 (USSR)

ABSTRACT: The authors determined the dipole moments of nitro- and nitroso-naphthols as well as of their methyl esters for the following reasons: 1) in order to explain the influence exercised by the intramolecular hydrogen bond on the dipole moments of molecules; 2) in order to check a generalization of previously found relationships between the dipole moments of the substituents of naphthalene and benzene (Ref 1); 3) in order to employ the electric properties of molecules for an investigation of the behavior of nitroso-naphthols and the 2,1- and 1,2-disubstituted derivatives of naphthalene. The results of measurement of the dielectric constant and the density of the various substances in benzene and dioxane are

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Intramolecular Hydrogen Bond and Dipole Moments of Organic Compounds. VI. Nitro- and Nitroso-naphthols

SOV/76-33-10-3/45

given (Tables 1, 2). The values calculated for $P_{2\infty}$ according to Hedestrand (Ref 4) as well as $P_{\infty+a} = 1.05\ MR_D$ and the dipole moments were compared (Table 3). The experimental values of the dipole moments for the corresponding disubstituents of benzene are listed, and the same values are calculated for the condition of free rotation of functional groups not affecting one another. The latter calculation was made according to Fuchs' equation (Ref 5). The dipole moments show that there is an intramolecular hydrogen bond in 1,2- and 2,1-nitre-naphthols, while it lacks in 1,2- and 2,1-nitrosonaphthols. Except for 1-nitre-2-naphthol methyl ester, all nitre-naphthols and their methyl esters have a dipole moment higher than that of the corresponding disubstituents of benzene. This confirms that there is a considerably stronger bond of the groups in the naphthalene cycle than is in the benzene cycle. In benzene, 1,4-nitroso-naphthol has primarily a phenol structure as well as (apparent-

KOCHERGINA, L. A., Cand Chem Sci (diss) -- "The dipole moments and structure of certain substituted naphthalenes". Khar'kov, 1960. 12 pp (Min Higher and Inter Spec Educ Ukr SSR, Khar'kov Polytech Inst im V. I. Lenin), 120 copies (KL, No 14, 1960, 127)

LUTSKIY, A.Ye.; KOCHERGINA, L.A.; ZADOROZHNYY, B.A.

Intramolecular hydrogen bonding and dipole moments in organic compounds. Part 7: Phenylazo-, carboxyl-, and carbomethoxy-substituted naphthols. Zhur. ob. khim. 30 no.12:4080-4085 D '60. (MIRA 13:12)

1. Khar'kovskiy politekhnicheskiy institut.
(Naphthol-Dipole moments) (Hydrogen bonding)

LUTSKIY, A.Ye.; KOCHERGINA, L.A.

Dipole moments of α- and β-monosubstituted naphthalene. Zhur.fiz.khim. 37 no.2:460-463 F '63. (MIRA 16:5)

1. Khar'kovskiy politekhnicheskiy institut imeni Lenina.
(Naphthalene—Dipole moments)

S/076/63/037/003/014/020
B101/B215

AUTHORS: Lutskiy, A. Ye., Kochergina, L. A., Zadorozhnyy, B. A.

TITLE: Intramolecular hydrogen bonds and dipole moments of organic compounds. X. Carboxyl-substituted and amido-substituted naphtholes

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 3, 1963, 671-674

TEXT: The dipole moments μ_H of the compounds $C_{10}H_6XY$, where X = COOH, $COOCH_3$, $CONH_2$, $CONHC_6H_5$, Y = OH of OCH_3 and of 2-methoxy-3-carbomethoxy-1,4-dihydronaphthaline were measured. The μ_H values in Debyes for various positions of the substituents are the following: 1-COOH, 2-OH 2.45; 1-COOH, 2-OCH_3 2.92; 1-$COOCH_3$, 2-OH 2.62; 1-$COOCH_3$, 2-OCH_3 2.17; 2-$COOCH_3$, 1-OH 2.27; 2-COOH, 1-OCH_3 4.98; 2-$COOCH_3$, 1-OCH_3 2.57; 4-$COOCH_3$, 1-OCH_3 5.07; 2-$COOC_6H_5$, 1-OH 2.54; 2-$COOC_6H_5$, 3-OH 2.52; 3-$COOCH_3$, 2-OCH_3, 1-H, 4-H 2.19; 2-$CONH_2$, 3-OH 5.54; 2-$CONH_2$, 3-OCH_3 4.72;
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2-$CONHC_6H_5$, 3-OH 5.35; 2-$CONHC_6H_5$, 3-OCH_3 4.97. Conclusions: The dipole moments of the compounds studied obey the same rules as observed for compounds with intramolecular H bonds between OH and C=O (or NO_2) groups. An intramolecular H bond forms in the molecules of all disubstituted compounds with COOH and OCH_3 in ortho position in benzene solution, with the OH group of the carboxyl group acting as proton donor. In the disubstituted derivatives of naphthaline with COOR and OR groups (R = H, CH_3, or C_6H_5), μ_H of the isomers decreases as follows: $\mu_{1,4} > \mu_{2,3} > \mu_{2,1} > \mu_{1,2}$. There are 4 tables.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut im. V. I. Lenina (Khar'kov Polytechnic Institute imeni V. I. Lenin)

SUBMITTED: May 7, 1962

Card 2/2

LUTSKIY, A.Ye.; KOCHERGINA, L.A.; BUGAY, P.M.

Dipole moments of some substituted diphenylamines. Zhur.ob.khim. 33 no.3:985-987 Mr '63. (MIRA 16:3)

1. Khar'kovskiy politekhnicheskiy institut imeni V.I. Lenina.
(Diphenylamine—Dipole moments)

LUTSKIY, A. Ye.; KOCHERGINA, L. A.; ZADOROZHNYY, B. A.

Intramolecular hydrogen bonding and the dipole moments of organic compounds. Part 1. Zhur. fiz. khim. 37 no. 3:671-674 Mr '63. (MIRA 17:5)

1. Khar'kovskiy politekhnicheskiy institut imeni Lenina.

KOCHERGINA, N. A., Cand of Agric Sci -- (diss) "Development of the Root System and Foliage in Vernalized Wheat Under Various Conditions of Cultivation," Leningrad-Pushkin, 1959, 22 pp (Leningrad Agricultural Institute) (KL, 1-60, 124)

KOCHETOVA, N. M.

"Investigation of the Quality of Diazoprints From Drawing in Respect to Their Production Technology." Thesis for degree of Cand. Technical Sci. Sub 20 Feb 50, Moscow Order of Lenin Aviation Inst imeni Sergo Ordzhonikidze.

Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya Moskva, Jan-Dec 1950.

S/054/63/004/002/020/022
B101/B215

AUTHORS: Parfenov, A. I., Shul'ts, Z. M., Kochergina, T. K., Ivanov, V. P., Yevnina, S. B., Kalmykova, L. ..., Ageyeva, Ye. D.

TITLE: Electrode properties and chemical stability of a number of multicomponent glasses

PERIODICAL: Leningrad. Universitet. Vestnik. Seriya fiziki i khimii, no. 1, 1963, 162-166

TEXT: Lithium silicate glasses containing additions of Cs_2O, BaO, La_2O_3, TiO_2, ZrO_2, and ThO_2 were studied by plotting their E versus pH curves in alkaline media at 95 and 150°C in order to extend to strongly alkaline media, and to temperatures above 100°C, the applicability of glass electrodes for pH measurements. Results: Glasses containing up to 4% Cs_2O and 2-6% BaO have the widest H^+ function range in alkaline media at 95°C. Additions of TiO_2, ZrO_2, or ThO_2 up to 2% do not change

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the upper limit of the H^+ function in alkali, but improve the electrode characteristics in a strongly acid medium at high temperatures. If these additions exceed 2%, the upper H^+ limit is shifted toward lower pH values. In 1 N NaOH at 150°C, the chemical stability of glasses was found to decrease at an increasing content of Ce_2O and BaO. The stability is increased by adding TiO_2, ZrO_2, and ThO_2, and decreased by raising the temperatures. The life of electrodes at 150°C was only 1/50 that observed at 95°C. There are 2 tables.

[illegible] October 1962

Dissertation: "Permeability of Capillaries in Heliotropic Dermatolystrophy." Cand Med Sci, Tashkent Medical Inst, 12 May 54. (Pravda Vostoka, Tashkent, 22 Apr 54)

SO: SUM 241, 19 Oct 1954

KHODZHAYEV, A.Kh.; KOCHEROINA, N.Z.

Treatment of atherosclerosis with Co No.8. Med. zhur. Uzb. no.2: 48-53 F '62. (MIRA 15:4)

1. Is kafedry gospital'noy terapii lechebnogo fakul'teta (zav. - prof. Z.I.Umidova) Tashkentskogo gosudarstvennogo meditsinskogo instituta.

(ARTERIOSCLEROSIS) (COBALT—THERAPEUTIC USE)

KHODZHAYEV, A.Kh., prof.; KOCHEROINA, N.Z., kand.med.nauk

Cobalt content in the blood of arteriosclerosis patients. Med. zhur.Uzb. no.8:8-13 Ag '62. (MIRA 16:4)

1. Iz kafedry gospital'noy terapii lechebnogo fakul'teta (zav. - prof. Z.I.Umidova) Tashkentskogo gosudarstvennogo meditsinskogo instituta.

(COBALT - THE BODY) (ARTERIOSCLEROSIS)

KOCHERGIN, T. YA

24(7) PHASE I BOOK EXPLOITATION SOV/1700

L'vov. Universitet

Materialy X Vsesoyuznogo soveshchaniya po spektroskopii, 1956. t. II: Atomnaya spektroskopiya (Materials of the 10th All-Union Conference on Spectroscopy, 1956. Vol 2: Atomic Spectroscopy) [L'vov] Izd-vo L'vovskogo univ., 1958. 568 p. (Series: Its: Fizichnyy zbirnyk, vyp. 4(9)) 1,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po spektroskopii.

Editorial Board: G.S. Landsberg, Academician, (Resp. Ed.); B.S. Neporent, Doctor of Physical and Mathematical Sciences; I.L. Fabelinskiy, Doctor of Physical and Mathematical Sciences; V.A. Fabrikant, Doctor of Physical and Mathematical Sciences; V.G. Koritskiy, Candidate of Technical Sciences; S.M. Rayskiy, Candidate of Physical and Technical Sciences; L.K. Klimovskaya, Candidate of Physical and Mathematical Sciences; V.S. Milyanchuk (Deceased), Doctor of Physical and Mathematical Sciences; A.Ye. Glauberman, Doctor of Physical and Mathematical Sciences; Ed.: S.L. Gazer; Tech. Ed.: T.V. Saranyuk.

PURPOSE: This book is intended for scientists and researchers in the field of spectroscopy, as well as for technical personnel using spectrum analysis in various industries.

COVERAGE: This volume contains 177 scientific and technical studies of atomic spectroscopy presented at the 10th All-Union Conference on Spectroscopy in 1956. The studies were carried out by members of scientific and technical institutes and include extensive bibliographies of Soviet and other sources. The studies cover many phases of spectroscopy: spectra of rare earths, electromagnetic radiation, physicochemical methods for controlling uranium production, physics and technology of gas discharge, optics and spectroscopy, abnormal dispersion in metal vapors, spectroscopy and the combustion theory, spectrum analysis of ores and minerals, photographic methods for quantitative spectrum analysis of metals and alloys, spectral determination of the hydrogen content of metals by means of isotopes, tables and atlases of spectral lines, spark spectrographic analysis, statistical study of variation in the parameters of calibration curves, determination of traces of metals, spectrum analysis in metallurgy, thermochemistry in metallurgy, and principles and practice of spectrochemical analysis.

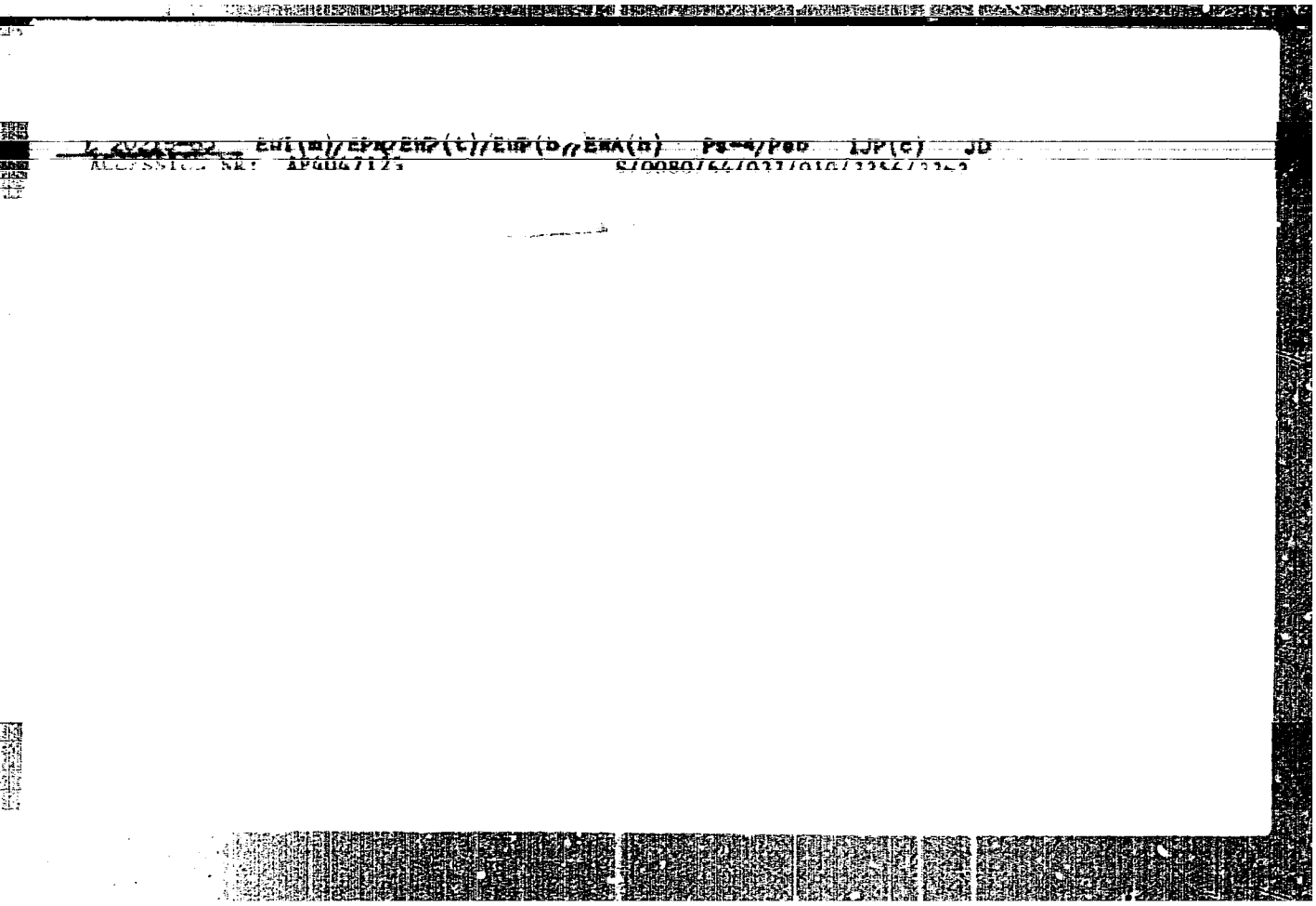
Card 1/31

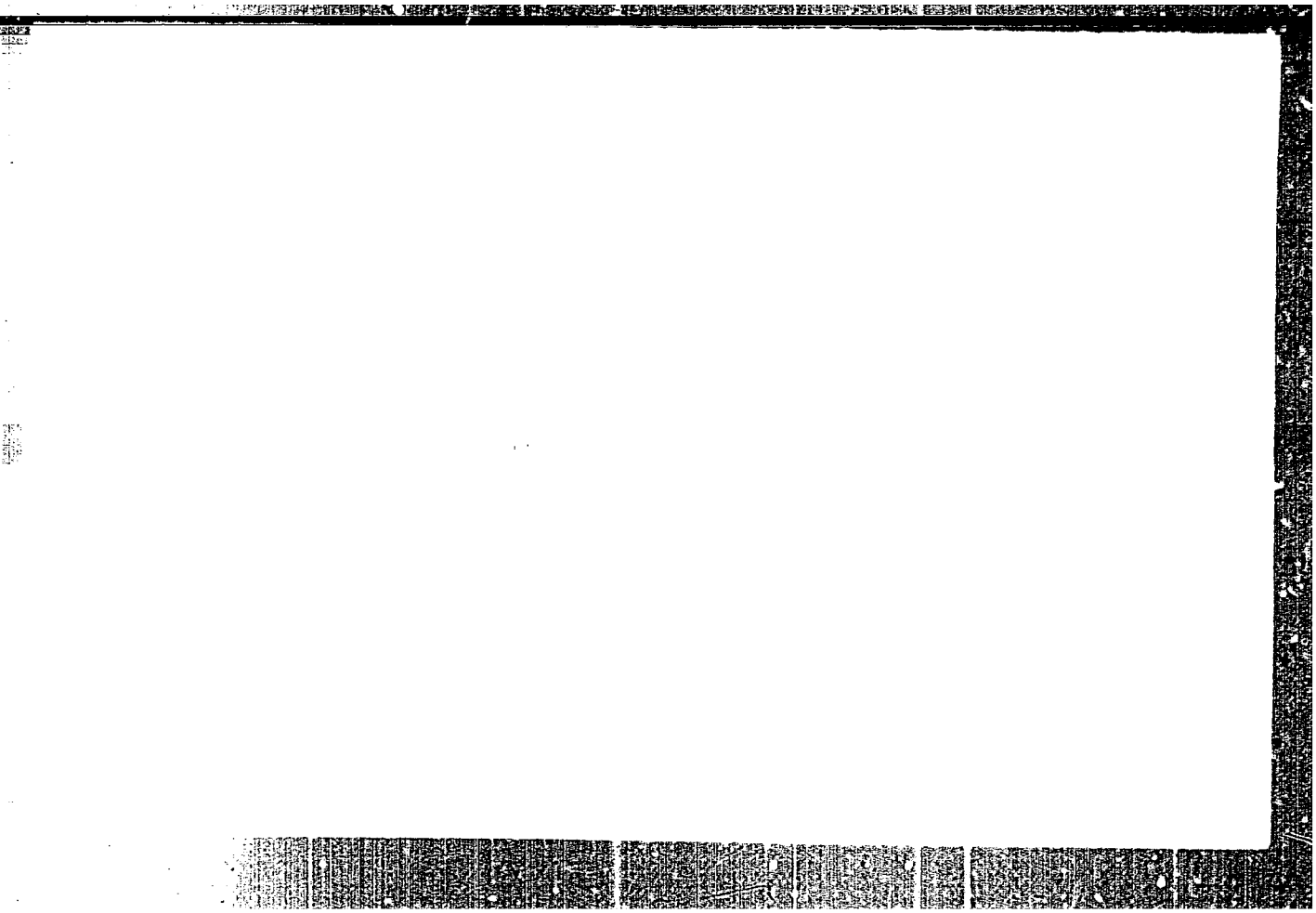
Materials of the 10th All-Union Conference (Cont.) SOV/1700

Card 21/31

KOCHERGINA, T.Ya.; ZAYTSEVA, V.A.

Spectral determination of Cu, Sn, Sb, Bi, and Ag in antimonial lead. Fiz.sbor. no.4:438-439 '58. (MIRA 12:5)
(Lead--Spectra)





APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723510007-6"

VLASOVA, Natal'ya Aleksandrovna; KOCHERGINA, Vera Sergeyevna; YUKHNOVSKAYA, S.I., red.

[Stuttering is curable] Zaikanie izlechimo. Izd.2. Moskva, Meditsina, 1965. 35 p. (MIRA 18:3)

KOCHERGINA, V.S. (Moskva)

Results of medicinal treatment of stammering in adults. Zhur. nevr. i psikh. 65 no.5:753-756 '65. (MIRA 18:5)

KOCHERGINA, V.S.

Development of the correlation of the signal systems in normal children 3-8 years old. Zhur.vys.nerv.deiat.5 no.3: 363-369 My-Je '55. (MLRA 8:10)

1. Nauchno-issledovatel'skiy institut psikhiatrii Ministerstva zdravookhraneniya SSSR.
(CEREBRAL CORTEX, physiology,
signal systemsis in child)

VLASOVA, Nateliya Aleksandrovna; KOCHERGINA, Vera Sergeyevna; SKORBILINA, T.N., red.; BALDINA, M.F., tekhn.red.

[Stammering is curable] Zaikanie izlechimo. Moskva, Gos. izd-vo med.lit-ry, 1960. 31 p. (MIRA 14:2)
(STAMMERING)

DESHCHEKINA, M.F.; KOCHERGINA, V.S.

Characteristics of the development of birth-injured school children making good progress in public schools. Pediatriia 42 no.6:46-50 Je'63 (MIRA 17:1)

1. Iz kafedry gospital'noy pediatrii (ispolnyayush-'iy obyazannosti zaveduyushchego - prof. K.F. Sokolova) II Moskovskogo gosudarstvennogo meditsinskogo instituta imeni N.I.Pirogova i detskoy kliniki (zav. - doktor med. nauk G.K.Ushakov) Instituta psikhiatrii (dir.-deystvitel'nyy chlen AMN SSSR A.V.Snezhnevskiy) AMN SSSR.

KOCHERGINA, V.S.

Some pathophysiological characteristics of stuttering children of preschool age. Vop. psikh. no.4:300-318 '60. (MIRA 14:2)
(STAMMERING)

GASANOV, Sh.M., prof., zasluzhennyy deyatel' nauki; KOCHERGINA, Ye.K.

Effect of the climate of Adzhikend on the content of ascorbic acid and the catalase activity in the blood in healthy persons. Sbor. trud. Azerb. nauch.-issl. inst. kur. i fiz. metod. lech. no.9:24-25 '63. (MIRA 18:8)

EFENDIYEVA, F.M.; SHAKHMAZAROV, B.B.; KRAVETS, I.L.; KOCHERGINA, Ye.K.

Effectiveness of electrophoresis of novocaine combined with ascorbic acid in treating cerebral atherosclerosis. Vop. kur., fizioter. i lech. fiz. kult'. 30 no.3:206-209 My-Je '65. (MIRA 18:12)

1. Azerbaydzhanskiy institut kurortologii i fizicheskikh metodov lecheniya imeni S.M. Kirova, Baku. Submitted April 24, 1963.

[redacted], N.Kh.; KOCHERGINA, Ye.K.

Effect of factors of the mountain climate of Adzhikend on the contents of sugar and chlorides in the blood. Gor. trud. Azerb. nauch.-issl. inst. kur. i fiz. metod. issl. no.9:26-27 '63. (MIRA 18:9)

RAMAZANOV, A.A., prof.; KOCHERGINA, Ye.K.; KRAVETS, I.L.

Effect of nitrous bases of Naftalan petroleum on experimental katalase and peroxidase activity in the blood. Sbor. trud. Azerb. nauch.-issl. inst. kur. i fiz. metod. lech. no.9: 34-35 '60. (MIRA 18:8)

U ZHUN-ZHUY [Wu Jung-jui]; STASYUK, Kh.A.; KOCHERGINSKAYA, L.A.; ROZENBLYUM, N.D.; KONKIN, A.A.; ROGOVIN, Z.A.

Radiation grafting of vinyl monomers to polyolefin fibers. Khim. volok. no.5:12-15 '63. (MIRA 16:10)

1. Moskovskiy tekstil'nyy institut.

L 30776-66 EWP(j)/EWT(m)/ETC(f) GG/RM/DS

ACC NR: AP6022136 SOURCE CODE: UR/0080/65/038/012/2662/2665

AUTHOR: Kocherginskaya, L. L.; Rosenblyum, M. D.; Stasyuk, Kh. A.; Zhitkova, L. G.; Breger, A. Kh.

ORG: none

TITLE: Obtaining ion-exchange membranes by the pre-irradiation method

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 12, 1965, 2662-2665

TOPIC TAGS: phosphorylation, ion exchange membrane, gamma irradiation, sulfonation

ABSTRACT: To verify the possibilities of the pre-irradiation method, polyolefin films were irradiated on a unit used for radiation-chemical research with Co^{60} gamma-radiation source (dose strength -- 0.15 megarad/hour) in the presence of atmospheric oxygen. The peroxide group content in irradiated films was determined by an iodometric method. It was established that the peroxide group content at room temperature does not vary over a period of two to three months. Grafting of the monomer was carried out in air at an elevated temperature outside the irradiated zone. For introduction of ionogenic groups, the grafted films underwent sulfonation, saponification, or phosphorylation. It was found that the presence of an oxidation inhibitor

Card 1/2

UDC: 661.183.123

37427

S/190/62/004/005/001/026
B119/B101

5.3231

AUTHORS: Kocherginskaya, L. L., Rozenblyum, N. D., Stasyuk, Kh. A.

TITLE: Preparation and properties of ion exchange films from graft copolymers on the basis of polyolefins and some monomers

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4 , no. 5, 1962, 633-636

TEXT: Ion exchange membranes were prepared by radiation grafting of styrene or mixtures of styrene and acrylonitrile on films of high-pressure polyethylene or of the ethylene copolymer with 15% propylene (SEP-15) (film thickness: 30 and 15 μ) and by subsequent sulfonation. Cobalt-60 was used as radiation source. The radiation dose was varied between 1.03 and 16.5 megarad, the mixing ratio acrylonitrile - styrene between 0 : 100 and 20 : 80, and the solvent for the monomer was also varied. The electrical resistivity in a 1 N NaCl solution, the extensibility, and the tensile strength of the resulting membranes were measured. Results: The electrical resistivity decreases as the content of graft monomer increases; whereas the ion exchange capacity increases. Extensibility and

Card 1/2

tensile strength are higher with CEP-15 than with polyethylene; the values increase with increasing content of acrylonitrile. Acrylonitrile reduces the brittleness of films which may then be stored in a dry place. Methanol as monomer solvent (80 to 85% solutions) reduces considerably the radiation dose required for grafting. 60 - 80 μ membranes with an electrical resistivity of 0.1 ohm·cm^2 in 1 N NaCl were obtained on the basis of CEP-15 with acrylonitrile and styrene. Their ion exchange capacity is approximately 4 mg·eq/g. There are 3 figures and 3 tables.

ASSOCIATION: Vsesoyuznyy institut istochnikov toka (All-Union Institute of Current Sources)

SUBMITTED: February 1, 1961

CA

PROCESSES AND PROPERTIES INDEX

11E

Gaseous, nitrogen and mineral metabolism during pregnancy. O. F. Makhanova and A. Z. Kuberginskii. *Voprosy Pitaniya* 8, No. 6, 17-20(1939). Two groups of 8 women were studied during the 3rd, 5th and 9th months of pregnancy. The daily diet contained 112-115 g. proteins, 100 g. fats, and fruits and vegetables (3300-3500 cal.). The basal metabolism of some women remained normal, in others it increased, especially during outdoor walks. The N metabolism was normal. Creatine was present in the urine of all. The assimilation of protein was 87-90%. The Ca/P ratio should not exceed 1:1.5. Mg is retained by the body if the daily intake amounts to 0.8 g. The daily intake of Cl was 8-9 g. Its elimination was normal. The pH of the urine varied from 5.9 to 6.7. The ammonia quotient (amt. of ammonia N × 100/total N) of the daily sample of most women was 2-4%, sometimes up to 6%. The resp. Q and oxidation quotient were normal, but slightly lower at the end of pregnancy. Since the gain in wt. was normal and healthy infants were born, with subsequent normal development, it is concluded that the diet was balanced and adequate to cover the physiol. requirements. T. Lasure

ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION

MOZZHUKHINA, L.A.; KOCHERGINSKIY, A.Z., red.

[Comparative evaluation of some methods for treating erosions and chronic cervicitis] Sravnitel'naia otsenka nekotorykh metodov lecheniia erozii i khronicheskikh tservitsitov. Kishinev, Gos.izd-vo Moldavii, 1958. 65 p. (MIRA 13:2)
(UTERUS--DISEASES)

KOCHEROINSKIY, A.S.; BILINKIS, S.Ya.

Influence of Botkin's disease on the course and outcome of pregnancy. Zdravookhranenie 2 no.5:17-21 S-O '59. (MIRA 13:4)

1. Iz kafedry fakul'tetskoy terapii (zaveduyushchiy - zasluzhennyy deyatel' nauki prof. N.F. Starostenko) Kishinevskogo meditsinskogo instituta.

(HEPATITIS, INFECTIOUS)

KOCHERGINSKIY, A.Z.; BILINKIS, S.Ya.

Influence of Botkin's disease on the course and outcome of pregnancy. Zdravookhranenie 2 no.5:22-25 S-O '59. (MIRA 13:4)

1. Iz kafedry akusherstva i ginekologii (zaveduyushchiy prof. A.Z. Kochergiuskiy) Kishinevskogo meditsinskogo instituta.
(HEPATITIS, INFECTIOUS) (PREGNANCY, COMPLICATIONS OF)

ZAKHAROV, V.I.; KOCHERGINSKIY, A.Z.; SOMOVOVA, V.F.; BATSAK, A.I.; AKHMETOVA, S.I.

Biological methods of treating treating trichomonal colpitis. Zdravookhranenie 3 no.1:49-52 Ja-F '60. (MIRA 13:6)

1. Iz kafedr obshchey biologii i parazitologii (zav. - prof. V.I. Zakharov) i akusherstva i ginekologii (zav. - prof. A.Z. Kocherginskiy) Kishinevskogo meditsinskogo instituta.
(TRICHOMONIASIS) (BLOOD AS FOOD OR MEDICINE)

KOCHERGINSKIY, A.Z.

Colpopoiesis from the perineum of the small pelvis in aplasia of the vagina. Zdravookhranenie 3 no.6:22-26 N-D '60. (MIRA 13:12)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.Z. Kochergin-skiy) Kishinevskogo meditsinskogo instituta.
(VAGINA--SURGERY)

KOCHERGINSKIY, A.Z., prof. (Kishinev)

Premature childbirth. Zdravookhranenie 4 no.6:12-17 N-D '61.
(MIRA 15:2)
(PREGNANCY, COMPLICATIONS OF)

KOCHERGINSKIY, A.Z., prof.; SHTERNBERG, M.I., kand. med. nauk; SHCHETININA, Ye., red.; BELOUSOVA, L., tekhn. red.

[Obstetric and gynecological aid in Moldavia] Akushersko-ginekologicheskaia pomoshch' v Moldavii. Kishinev, Kartia moldovenieske, 1962. 72 p. (MIRA 15:6)
(MOLDAVIA—OBSTETRICS) (MOLDAVIA—GYNECOLOGY)

KOCHERGINSKIY, A.Z., prof.

Role of the genital nerve in uterine innervation. Akush.i gin. no.4:108-111 '61. (MIRA 15:5)

1. Is kafedry akusherstva i ginekologii (zav. - prof. A.Z. Kocherginskiy) Kishinevskogo meditsinskogo instituta.
(UTERUS--INNERVATION)

ACC NR: AP6033299 SOURCE CODE: UR/0107/66/000/010/0045/0048

AUTHOR: Pen'kova, L.; Kocherginskiy, M.; Apirina, Ye.; Mendzheritskiy, E.

ORG: none

TITLE: Electrochemical current sources and their potentialities

SOURCE: Radio, no. 10, 1966, 45-48

TOPIC TAGS: storage battery, dry cell, electrochemistry

ABSTRACT: Three recently developed types of electrochemical current sources are described: 1. A zinc-manganese dioxide battery with salt electrolyte (MTs), hermitized. The positive electrode consists of a mixture of manganese dioxide and carbon materials; the negative electrode is formed by a zinc cup. The battery operates efficiently in a temperature range of -40C—+60C; and may be stored for several years. It is manufactured in 12 sizes. 2. Air-zinc (VTs) and zinc-manganese (MTs) batteries with an alkaline electrolyte in a vinyl plastic container. The negative electrode consists of zinc suspended in an electrolyte; the positive is made from activated carbon, acetylene black, and manganese dioxide moistened with an alkali solution. As compared with nickel-cadmium batteries, the VTs and MTs types have a much higher initial capacity and lower cost. The batteries may be stored for 12 months, and will operate in tropical climates. 3. Zinc-mercury batteries (RTs) have a high specific power, stable voltage, high reliability, and high mechanical strength. The electrolyte consists of concentrated caustic potash and zinc oxide.

Card 1/2

ACC NR: AP6033299

APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723510007-6"

Twenty variants of this type are produced, differing in size and capacity. Parameters of all three types of battery exceed established international and foreign standards. Orig. art. has: 10 figures and 4 tables.

SUB CODE: 10, 07/ SUBM DATE: none/

Card 2/2

ACC NR: AP6032490 SOURCE CODE: UR/0413/66/000/017/0030/0030

INVENTOR: Kocherginskiy, M. D.; Kalachev, S. L.; Pen'kova, L. F.; Nabiullina, M. Y.

ORG: none

TITLE: Air-depolarized zinc galvanic cell. Class 21, No. 185369 [announced by All-Union Scientific Research Institute of Current Sources (Vsesoyuznyy nauchno-issledovatel'skiy institut istochnikov toka)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 17, 1966, 30

TOPIC TAGS: galvanic cell, storage battery

ABSTRACT: An Author Certificate has been issued for an air-depolarized zinc galvanic cell which is assembled from series-connected disk elements and has an alkaline thickened electrolyte placed in a plastic container with a hermetically sealed cover (see Fig. 1). To simplify construction and extend cell life, a projection on the cover overlaps

Card 1/2 UDC: 621.352.7

ACC NR: AP6032490

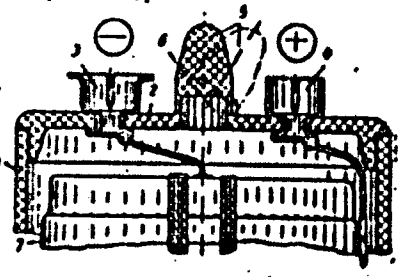


Fig. 1. Air-depolarized zinc galvanic cell

1 - Container; 2 - cover; 3 and 4 - terminals; 5 - projection; 6 - air vent; 7 - cell elements.

the air vent. This projection is removed when the cell is operating and is used as a plug when the cell is not in use. Orig. art. has: 1 figure.

SUB CODE: 10/ SUBM DATE: 13Sep65/

Card 2/2